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EXAMINER	
KOCH, GEORGE R	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/602,839	Applicant(s) LANEY ET AL.	
	Examiner George R. Koch III	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 6/9/05.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-44 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-14, 19-26, 33-36, and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber (US 5,288,548) and Freedman (US Patent 5,372,669).

It is noted that the applicant recites various "optional" steps and layers/components. All of these steps and layers/components are considered as not being required and thus as having no patentable weight.

Weber discloses a label facestock comprised of a skin or imaging receiving layer (column 2, lines 14-21), and a base or core layer comprised of a voided layer (see column 2, lines 27-56). Weber suggests manufacturing the facestock coxtrusion (see column 2, line 18) and biaxially stretching the layers (column 2, line 44) but is otherwise directed towards the structure of the layers. Weber discloses that the particular labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance and also discloses printing of the label face stock. Weber also discloses that it is known to apply adhesive to either the face or the liner (column 5, lines 11-12).

Freedman discloses a process for making a similar liner sheet comprising a multilayer sheet (for example, Figure 1, layers 12, 14, and 16) and a carrier sheet (layer 10), which multilayer sheet comprises, in order, microvoided layers analogous to a polymeric image-receiving layer (layer 14), a polymer sheets (layers 12 and 16), and an

adhesive layer. Freedman further discloses that the materials and procedures used for sheet stock and sheet liner (i.e., labels) may be the same or different as that of the roll stock and roll liner, but that the principles of construction for these layers can be similar (see column 7, lines 49-54 and Figures 5 and 6, which disclose similar facestock without the microvoids). Freedman discloses that the process comprises the following steps:

(a) providing a first sheet analogous to a pragmatic pre-label by the following steps:

(i) co-extruding (see figure 3a) a first melt for a polymeric image-receiving layer with one or more other melts for forming a single-layer or multiple-layer sheet analogous to the pragmatic polymer sheet, wherein said one or more other melts includes a second melt comprising an orientable thermoplastic polymeric material (layer 12) for forming a microvoided layer (voids - item 29) comprising a void initiator (items 22, 22a, and 22b), thereby forming a co-extruded cast composite film comprising at least said image-receiving layer and said microvoided layer;

(ii) stretching (column 3, line 49 to column 4, line 24) in at least one direction said cast composite film to reduce the thickness of the layers in the composite film and to produce an oriented composite film, wherein the image receiving layer is less than 15 micrometers thick (see column 4, lines 11-15, which discloses that the entire composite film can be as thin as .5 mils, i.e., 12.7

micrometers, of which the image receiving layer is a subcomponent and thus is smaller than 12.7 micrometers); and

(iv) applying a pressure-sensitive adhesive layer (see columns 4-5), or a laminate comprising a pressure-sensitive adhesive layer, to at least a portion of the back surface side of the stretched composite film, on the side opposite the layer analogous to the image-receiving layer, to form a pre-label receiver sheet or, when an intermediate sheet is present, to at least a portion of the back surface of the intermediate sheet;

(b) providing the pre-label receiver sheet with a carrier sheet (item 10) such that the adhesive layer of the pre-label receiver sheet is releasably covered with the cannier sheet in peelable adhesion, thereby forming an integral-separable sheet analogous to pre-label receiver sheet.

One in the art would appreciate that manufacturing the product of Weber would result in labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance (column 3, lines 21-29). Furthermore, one in the art would appreciate the methods and procedures of Freedman would result in successful manufacture of the layers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the successful and known manufacturing process of Freedman to create the product of Weber in order to achieve a label, i.e., a pragmatic pre-label sheet, that has excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance.

As to claim 2, Freedman as inccorporated discloses that the carrier sheet is laminated to the pragmatic pre-label sheet so that a front surface of the carrier sheet faces the back surface of the pragmatic pre-label sheet (see Figures 3a and 3c).

As to claim 3, Freedman discloses that at least one pragmatic-label portion is formed in the pragmatic pre-label sheet by cutting a shape through the pragmatic pre-label sheet but not through the carrier sheet (see Figure 3c).

As to claim 4, Freedman discloses that the microvoided layer can comprise a polyester material in the form of the filler material that forms the voids (see column 3, line 21) or the layer material (see column 10, line 45).

As to claim 5, Freedman further discloses that both the microvoided layer and the layer analogous to the image receiving layer can comprise a polyester material (items 22a and 22b) in the form of the filler material that forms the voids (see column 3, line 21, and see Figure 1) or the layer material (see column 10, line 45).

As to claim 6, Freedman discloses that the pragmatic polymer sheet further comprises a coextruded second layer (for example, item 16) in addition to the microvoided layer (item 12), said microvoided layer having a top side and a bottom side, wherein the coextruded second layer is on the bottom side of the microvoided layer and the image receiving layer (item 14) is on the top side of the microvoided layer.

As to claim 7, Freedman (see Figures 5 and 6) can be interpreted as disclosing that the pragmatic pre-label sheet consists essentially of only coextruded biaxially Stretched layers above the pressure-sensitive adhesive layer.

As to claim 8, the pragmatic pre-label sheet can be interpreted as consisting essentially of the image receiving layer (item 14) and the pragmatic polymer sheet (items 12 and 16).

As to claim 9, Freedman discloses that the pressure sensitive adhesive layer can be coated onto a peelable carrier to form a pressure sensitive adhesive transfer sheet, wherein the sheet is laminated to the back side of the stretched composite film such that steps (a)(iv) and (b) occur simultaneously (see column 6, lines 20-29).

As to claim 10, Freedman discloses that the carrier sheet comprises more than one layer (linerstock, see, for example, Figures 1 and 2, and especially 3A-D) and that the layers of the carrier sheet are applied to the pre-label receiver sheet in more than one step.

As claim 11, Weber discloses a label facestock comprised of a skin or imaging receiving layer (column 2, lines 14-21), and a base or core layer comprised of a voided layer (see column 2, lines 27-56). Weber suggests manufacturing the facestock coxtrusion (see column 2, line 18) and biaxially stretching the layers (column 2, line 44) but is otherwise directed towards the structure of the layers. Weber discloses that the particular labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance, and also discloses printing of the label face stock. Weber also discloses that it is known to apply adhesive to either the face or the liner (column 5, lines 11-12).

Freedman discloses a process for making a similar liner sheet comprising a multilayer sheet (for example, Figure 1, layers 12, 14, and 16) and a carrier sheet (layer 10), which multilayer sheet comprises, in order, microvoided layers analogous to a polymeric image-receiving layer (layer 14), a polymer sheets (layers 12 and 16), and an adhesive layer. Freedman further discloses that the materials and procedures used for sheet stock and sheet liner (i.e., labels) may be the same or different as that of the roll stock and roll liner, but that the principles of construction for these layers can be similar (see column 7, lines 49-54 and columns 7-9, and Figures 5 and 6, which disclose the manufacture of similar facestock without the microvoids). Freedman discloses that the process comprises the following steps:

(a) providing a pragmatic pre-label sheet by the following steps:

(i) co-extruding (see figure 3a) a first melt for a polymeric image-receiving layer with one or more other melts for forming a single-layer or multiple-layer pragmatic polymer sheet, wherein said one or more other melts includes a second melt comprising an orientable thermoplastic polymeric material (layer 12) for forming a microvoided layer (voids - item 29) comprising a void initiator (items 22, 22a, and 22b), thereby forming a co-extruded cast composite film comprising at least said image-receiving layer and said microvoided layer;

(ii) stretching (column 3, line 49 to column 4, line 24) in at least one direction said cast composite film to reduce the thickness of the layers in the composite film and to produce an oriented composite film, wherein the image receiving layer is less than 15 micrometers thick (see column 4, lines 11-15,

which discloses that the entire composite film can be as thin as .5 mils, i.e., 12.7 micrometers, of which the image receiving layer is a subcomponent and thus is smaller than 12.7 micrometers); and

(iv) applying a pressure-sensitive adhesive layer (see columns 4-5), or a laminate comprising a pressure-sensitive adhesive layer, to at least a portion of the back surface side of the stretched composite film, on the side opposite the image-receiving layer, to form a pre-label receiver sheet or, when an intermediate sheet is present, to at least a portion of the back surface of the intermediate sheet;

(b) providing the pre-label receiver sheet with a carrier sheet (item 10) such that the adhesive layer of the pre-label receiver sheet is releasably covered with the cannier sheet in peelable adhesion, thereby forming an integral-separable pre-label receiver sheet.

(c) imagewise thermally transferring dyes to form at least one image in the image-receiving layer (see column 4, lines 48-55);

(d) cutting at least one shape into at least the pre-label receiver sheet to form at least one pragmatic label comprising a thermal-dye-transfer image, thereby forming an integral-separable label sheet comprising a pragmatic-label sheet attached to a carrier sheet (see Figures 3a and 3c).

One in the art would appreciate that manufacturing the product of Weber would result in labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance (column 3, lines 21-29).

Furthermore, one in the art would appreciate the methods and procedures of Freedman would result in successful manufacture of the layers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the successful and known manufacturing process of Freedman to create the product of Weber in order to achieve a label, i.e., a pragmatic pre-label sheet, that has excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance.

As to claim 12, Freedman discloses that the cutting lines can be formed at least partially through the integral separable pre-label receiver sheet, so to allow peeling of at least one pragmatic label portion comprising a portioned image receiving layer, substrate and bottom pressure sensitive adhesive layer, wherein the substrate consists of all of the layers, including the portioned pragmatic polymer between the image receiving layer and the bottom pressure sensitive layer.

As to claim 13, Freedman discloses that the integral separable label sheet comprises a plurality of pragmatic label portions and cutting lines are formed around and through each pragmatic label portion but substantially not in or through the carrier sheet (see, for example, Figure 3c and column 6).

As to claim 14, Freedman discloses multiple pragmatic label portions in the sheet are formed (see Figure 3c) by sectioning the sheet into a plurality of frames each forming a separable label.

As to claim 15, Freedman discloses imagewise thermally transferring dyes to form at least one image in the image-receiving layer (see column 4, lines 48-55).

As to claim 19, Freedman discloses that the microvoided layer can comprise a continuous phase polyester matrix (column 10, line 45) having dispersed therein void initiators selected from the group consisting of crosslinked organic microbeads, inorganic particles, non-crosslinked polymer particles that are immiscible with the polyester matrix and combinations thereof (see column 3, lines 9-50), said microvoided layer having a void volume of at least 25% by volume (see ccolumn 3, lines 22-25, which discloses a filler , i.e., void, volume of 5% to 40% by weight).

Furthermore, as to claims 19-21, Freedman discloses the claimed materials, such as various organic materials, inorganic materals, and polymer particles, being used in a polyester matrix and having a void volume of 25% (5 to 40% by weight - in the case of polyester particles in a polyester matrix, 5 to 40% by weight would be 5 to 40% by volume, since the particles would have approximately the same weight as the matrix). However, Freedman does not explicitly disclose all of the combinations, such as the combinations of the claimed materials, or whether the materials are microbeads. However, one in the art would immediately appreciate that any combination and variation of the materials would allow for finer modification of the void properties, such as density and hardness. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such combinations and forms in order to achieve finer control over the void properties.

As to claim 22, Freedman discloses a coextruded third layer as claimed (item 16).

As to claim 23, Freedman discloses that the coextruded third layer can be polyester (column 10, line 45).

As to claim 24, Freedman as applied to claims 19-21 above discloses that the microvoided layer can be a continuous phase polyester matrix and makes obvious that the microvoided layer can have dispersed therein only crosslinked polymer microbeads.

As to claim 25, dependent on claim 20 or 21, Freedman discloses that the coextruded third layer can be a non-void polyester (column 10, line 45).

As to claim 26, Freedman discloses that the void volume is 5 to 40% by weight. Furthermore, official notice is taken that extending the void volume to 65% by volume would be well known and conventional. One in the art would immediately appreciate that any combination and variation of the materials would allow for finer modification of the void properties, such as density and hardness. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such combinations and forms in order to achieve finer control over the void properties.

As to claim 33 and 34, the microvoided layer Freedman, being made of substantially similar materials as claimed and with substantially similar voids, would inherently include the claimed density.

As to claim 35, Freedman discloses that the total thickness of the laminate can be between 0.5 mils to 10 mils (12.7 micrometers to 254 micrometers). Furthermore, Freedman discloses that the thickness of the non-voided layers (items 14 and 16) can be between one tenth of a mil to several tenths of a mil (i.e., 2.54 micrometers to 17.8

micrometers). Thus, Freedman discloses that the void layer can be between 20 to 150 micrometers.

As to claim 36, Freedman discloses that the image receiving layer (item 14) can comprise polyester (column 10, line 45) or polycarbonate (column 8).

As to claim 38, while Freedman discloses the claimed materials, Freedman does not suggest the combination in the polymester matrix at the claimed ratios. However, official notice is taken that selecting the combination of crosslinked organic microbeads to non-crosslinked polymer particles as void initiators in the claimed range of 4:1 to 1:4 is well known and conventional. One in the art would immediately appreciate that any combination and variation of the materials would allow for finer modification of the void properties, such as density and hardness. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such combinations and forms in order to achieve finer control over the void properties.

As to claim 39, Weber discloses a label facestock comprised of a skin or imaging receiving layer (column 2, lines 14-21), and a base or core layer comprised of a voided layer (see column 2, lines 27-56). Weber suggests manufacturing the facestock coxtrusion (see column 2, line 18) and biaxially stretching the layers (column 2, line 44) but is otherwise directed towards the structure of the layers. Weber discloses that the particular labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance, and also discloses printing

of the label face stock. Weber also discloses that it is known to apply adhesive to either the face or the liner (column 5, lines 11-12).

Freedman discloses a process for making a similar liner sheet comprising a multilayer sheet (for example, Figure 1, layers 12, 14, and 16) and a carrier sheet (layer 10), which multilayer sheet comprises, in order, microvoided layers analogous to a polymeric image-receiving layer (layer 14), a polymer sheets (layers 12 and 16), and an adhesive layer. Freedman further discloses that the materials and procedures used for sheet stock and sheet liner (i.e., labels) may be the same or different as that of the roll stock and roll liner, but that the principles of construction for these layers can be similar (see column 7, lines 49-54 and columns 7-9, and Figures 5 and 6, which disclose the manufacture of similar facestock without the microvoids). Freedman discloses that the process comprises the following steps:

(a) providing a pragmatic pre-label sheet by the following steps:

(i) co-extruding a first melt for a polymeric image-receiving layer with at least two other melts for forming a multiple-layer pragmatic polymer sheet, wherein said at least two other melts includes a second melt comprising a continuous phase polymer matrix (column 3, lines 1-8) having dispersed therein cross-linked organic microbeads (for example, items 22, 22a, and 22b - and see column 3 which discloses that these filler items can be organic materials), and a third melt comprising a voided or non-voided thermoplastic material (column 3, lines 1-8), thereby forming a coextruded cast composite film comprising at least said three layers (items 12, 14, and 16), the image-receiving layer (item 14), the

microvoided layer (item 12, voids, item 29) and the voided or non-voided thermoplastic material (item 16);

(ii) stretching (see column 3, line 51 to column 4, line 10) in at least one direction said cast composite film to reduce the thickness of the layers in the composite film and to produce an oriented composite film comprising as the first layer an image-receiving layer, as the second layer a microvoided compliant layer, and as a third layer a microvoided or non-voided underlayer, wherein the image receiving layer is less than 15 micrometers thick (see column 4, lines 11-15, which discloses that the entire composite film can be as thin as .5 mils, i.e., 12.7 micrometers, of which the image receiving layer is a subcomponent and thus is smaller than 12.7 micrometers); aad

(iv) applying a pressure-sensitive adhesive layer (see columns 4-5), or a laminate comprising a pressure-sensitive adhesive layer, to at least a portion of back surface side of the sketched composite film, on the side opposite the image-receiving layer, to form a pragmatic-label sheet or, when an intermediate sheet is present, to at least a portion of the back surface of the intermediate sheet; and

(b) providing the pragmatic pre-label sheet with a carrier sheet (item 10) such that the adhesive layer of the pragmatic pre-label sheet is releasably covered with the carrier sheet in peelable adhesion, thereby forming an integral-separable pre-label receiver sheet.

One in the art would appreciate that manufacturing the product of Weber would result in labelstocks can have excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance (column 3, lines 21-29). Furthermore, one in the art would appreciate the methods and procedures of Freedman would result in successful manufacture of the layers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the successful and known manufacturing process of Freedman to create the product of Weber in order to achieve a label, i.e., a pragmatic pre-label sheet, that has excellent receptivity to impact and thermal printing methods, with excellent ink adhesion and smear resistance.

As to claim 40, Freedman as incorporated discloses that the at least two other melts for forming a multiple-layer pragmatic polymer sheet, wherein said at least two other melts includes a second melt comprising a continuous phase polymer matrix (column 3, lines 1-8) having dispersed therein cross-linked organic rnicrobeads (for example, items 22, 22a, and 22b - and see column 3 which discloses that these filler items can be organic materials), and a third melt comprising a voided or non-voided thermoplastic material (column 3, lines 1-8), thereby forming a coextruded cast composite film comprising at least said three layers (items 12, 14, and 16), the image-receiving layer (item 14), the microvoided layer (item 12) and the voided or non-voided thermoplastic material (item 16).

As to claim 41, official notice is taken that the use of fiducial marks is notoriously well known and conventional Such marks are routinely used to enable registration of

the labels and to enable registration of the images in order to ensure quality. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized fiducial marks in order to ensure quality in registering the print images.

As to claim 42, Freedman does not suggest utilizing exposed edges. However, official notice is taken that it would have been well known and conventional to utilize exposed edges having a width less than 20 millimeters. One in the art would appreciate that exposed edges would have improve the capability to peel the label off the carrier Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized exposed edges in order to improve the ability to peel the label off the carrier.

As to claim 43, Freedman discloses using peelable carriers, but does not suggest utilizing a peelable carrier with the claimed stiffness. However, official notice is taken that it would have been well known and conventional to a stiffness of 15 to 60 millinewtons. One in the art would appreciate that the claimed stiffness would have improve the capability to peel the label off the carrier. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claimed stiffness in order to improve the ability to peel the label off the carrier.

As to claim 44, Freedman discloses the step of removing the carrier and applying the pragmatic label portion (item 34, figure 3d) to a package or container (item 36).

3. Claims 11, 12, 15-18, 27-37, 42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber and Freedman as applied to claim 1 and 11 above, and

further in view of Shirai (US Patent 6,153,558), Harrison (US 5,399,218), Oshima (US 6,162,517) or a combination thereof.

As to claim 7, Weber and Freedman is interpreted as disclosing biaxial stretching. In any event, Harrison explicitly disclose that biaxial stretching may be used. Harrison discloses that biaxial stretching (column 6, lines 23-38) and one in the art would appreciate that such stretching ensures that the film achieves the proper thickness and thickness consistency. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such biaxial stretching in order to achieve proper thickness and thickness consistency.

As to claim 11 and 15, Weber and Freedman as applied above in claims 1 and 11 suggests applying thermal dyes, which are interpreted as images. It can be argued that this transferring is not part of an image. However, Shirai discloses transfering thermal dyes (column 5, line 37 to column 6, line 11), and discloses that doing so ensures that images are placed on the composite. Oshima discloses that sublimation transfer printing can improve image quality (see columns 6-16). Harrison discloses that sublimable dyes result in good print results (column 7, lines 31-42). One in the art would immediately recognize that such improved images would increase the desirability of the labeled articles. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such transfer printing in order to achieve quality images.

As to claim 12, Freedman as incorporated discloses that the cutting lines can be formed at least partially through the integral separable pre-label receiver sheet, so to

allow peeling of at least one pragmatic label portion comprising a portioned image receiving layer, substrate and bottom pressure sensitive adhesive layer, wherein the substrate consists of all of the layers, including the portioned pragmatic polymer between the image receiving layer and the bottom pressure sensitive layer.

As to claim 16, Oshima as incorporated above discloses that the dye image is a sublimations transferred image.

As to claim 17 and 18, the sublimation process of Oshima discloses achieving the claimed density (see Table 2, columns 17-18).

As to claim 27, Freedman as incorporated does disclose that the microvoided layer can be polyester thermoplastics, but does not go into further detail to suggest that the polyester is polyethylene terephthalate or a copolymer thereof.

Harrison discloses that the polyester for a core layer containing voids can be polyethylene terephthalate and copolymers thereof (see column 5, lines 5-26). Furthermore, Harrison discloses polyethylene terephthalate is especially preferred (see column 5, lines 52-53), and one in the art would appreciate that this material provides desirable material qualities. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized polyethylene terephthalate in order to achieve desirable material qualities.

As to claims 28-32, official notice is taken that the claimed materials are well known and conventional in view of the materials disclosed in Weber, Freedman, Harrison, Shirai and Oshima. One in the art would immediately appreciate that these material provide various desirable material qualities. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention to have these materials in order to achieve desirable material qualities.

As to claim 33 and 34, the microvoided layers of Freedman as incorporated, being made of substantially similar materials as claimed and with substantially similar voids, would inherently include the claimed density. Alternatively, official notice is taken that it would have been well known and conventional to have experimentally achieved the claimed microvoid densities. One in the art would appreciate that the claimed density could be achieved by routine experimentation, and in light with desired end product quality. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claimed densities in order to achieve a desirable end product.

As to claim 35, Freedman as incorporated discloses that the total thickness of the laminate can be between 0.5 mils to 10 mils (12.7 micrometers to 254 micrometers). Furthermore, Freedman discloses that the thickness of the non-voided layers (items 14 and 16) can be between one tenth of a mil to several tenths of a mil (i.e., 2.54 micrometers to 17.8 micrometers). Thus, Freedman discloses that the void layer can be between 20 to 150 micrometers.

As to claim 36, Freedman as incorporated discloses that the image receiving layer (item 14) can comprise polyester (column 10, line 45) or polycarbonate (column 8).

As to claim 37, Freedman as incorporated discloses a number of polymer materials, including polyester and polycarbonate, but does not suggest combining

polyester and polycarbonate in the claimed ranges. However, official notice is taken that it would have been well known and conventional to have experimentally achieved the claimed mixture of the two disclosed materials. One in the art would appreciate that the claimed material could be achieved by routine experimentation, and in light with desired end product quality. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claimed weight ratio in order to achieve a desirable end product.

As to claim 42, Freedman as incorporated does not suggest utilizing exposed edge. However, official notice is taken that it would have been well known and conventional to utilize exposed edges having a width less than 20 millimeters. One in the art would appreciate that exposed edges would have improve the capability to peel the label off the carrier Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized exposed edges in order to improve the ability to peel the label off the carrier.

As to claim 44, Freedman as incorporated discloses the step of removing the carrier and applying the pragmatic label portion (item 34, figure 3d) to a package or container (item 36).

Response to Arguments

4. Applicant's arguments filed June 9th, 2005 have been fully considered but they are not persuasive.

Applicant's position is that Weber and Freedman do not disclose or make obvious a process step of ***co-extruding*** an image receiving layer and a micro-voided layer (page 1 and 2 of the response). However, Weber specifically recites,: "This combination is then ***coextruded*** with clear unfilled polypropylene so as to have a thin skin layer on opposite surfaces of the core combination of the materials (column 2, lines 40-42). This skin layer is intended to be printed upon (see column 1, lines 42-44, column 4, lines 66-68 - and note that the title of the invention is "Label Face Stock", i.e., the surface that gets printed upon).

Furthermore, Freedman discloses processes that are identical to the claimed processes for creating liner-stock. However, Freedman further discloses that the materials and procedures used for sheet stock and sheet liner (i.e., labels) may be the same or different as that of the roll stock and roll liner, but that the principles of construction for these layers can be similar (see column 7, lines 49-54 and columns 7-9, and Figures 5 and 6, which disclose the manufacture of similar facestock without the microvoids). Therefore, the core layers in Freedman as specified in page 3 of the response can include a microvoided core.

As to Weber and Freedman being incompatible due to the coating in Weber, this is not persuasive. Both Weber and Freedman are directed towards co-extrusion processes (see Weber, column 2). Weber also discloses coating processes (see weber, column 4). The coating process is not incompatible with the co-extrusion process since Weber discloses both of them being performed together.

With regard to the remarks directed towards the Shirai, Harrison, or Oshima references, it is unclear what applicant is referring by "foamed" in page 4, line 19. In any event, Weber and Freedman disclose co-extrusion as discussed above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and

giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GRK
8/20/2005